IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MAXELL, LTD.,))
	Plaintiff,)
v.) C.A. No
BLU PRODUCTS, INC.,)) JURY TRIAL DEMANDED
	Defendant.)))

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Maxell, Ltd. ("Maxell"), by and through its undersigned counsel, files this complaint under 35 U.S.C. § 271 for Patent Infringement against Defendant Blu Products, Inc. ("Defendant") and further alleges as follows, upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters.

OVERVIEW

- 1. This is an action for patent infringement brought by Maxell. Founded in 1961 as Maxell Electric Industrial Co., Ltd., Maxell is a leading global manufacturer of information storage media products, including magnetic tapes, optical discs, and battery products such as lithium ion rechargeable micro batteries and alkaline dry batteries, and the company has over 50 years of experience producing industry-leading recordable media and energy products for both the consumer and the professional markets.
- 2. Maxell has built an international reputation for excellence and reliability, for pioneering the power supplies and digital recording for today's mobile and multi-media devices, and leading the electronics industry in the fields of storage media and batteries.

- 3. Since being one of the first companies to develop alkaline batteries and Blu Ray camcorder discs, Maxell has always assured its customers of industry leading product innovation and is one of the world's foremost suppliers of memory, power, audio, and visual goods.
- 4. As set forth below, in 2009 Hitachi, Ltd. assigned intellectual property, including the patents in this case, to Hitachi Consumer Electronics Co., Ltd. Then, in 2013, Hitachi Consumer Electronics Co., Ltd. assigned the intellectual property, including the patents in this case, to Hitachi Maxell, Ltd., which later assigned the patents to Maxell as a result of a reorganization and name change. This was an effort to align its intellectual property with the licensing, business development, and research and development efforts of Maxell, including in the mobile and mobile-media device market (Hitachi, Ltd., Hitachi Consumer Electronics Co., Ltd., and Hitachi Maxell, Ltd., are referred to herein collectively as "Hitachi"). Maxell continues to sell products in the mobile device market including wireless charging solutions, wireless flash drives, multimedia players, storage devices, and headphones. Maxell also maintains intellectual property related to televisions, tablets, digital cameras, and mobile phones. As a mobile technology developer and industry leader, and due to its historical and continuous investment in research and development, Maxell owns a portfolio of patents related to such technologies and actively enforces its patents through licensing and/or litigation. Maxell is forced to bring this action against Defendant as a result of Defendant's knowing and ongoing infringement of Maxell's patents.

PARTIES

5. Plaintiff Maxell, Ltd. is a Japanese corporation with a registered place of business at 1 Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun, Kyoto, Japan.

- 6. On information and belief, Defendant Blu Products, Inc. is a Delaware company with a principal place of business located at 10814 NW 33rd Street, Doral, FL, 33172.
- 7. On information and belief, Defendant Blu Products, Inc. is in the business of providing information and communications technology solutions. Specifically, Blu Products, Inc. provides wireless telecommunications equipment, including smart phones, tablets, and mobile phones.

NATURE OF THE ACTION, JURISDICTION, AND VENUE

- 8. Maxell brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271 et seq.
- 9. This Court has subject matter jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States.
- 10. The Court has personal jurisdiction over the Defendant because (1) Maxell's claims arise in whole or in part from Defendant's conduct in Delaware; (2) Blu Products, Inc. is organized under the laws of Delaware, maintains continuous and systematic contacts within the state of Delaware; (3) Defendant has committed a tortuous act causing injury within the state of Delaware, namely, one or more acts of patent infringement as alleged herein; and (4) Defendant is subject to personal jurisdiction under the provisions of the Delaware Long Arm Statute, Del. Code. Ann. Tit. 3 § 3104, by virtue of the fact that, upon information and belief, Defendant has availed itself of the privilege of conducting and soliciting business within this State, including engaging in at least some of the infringing acts alleged herein through the sales and marketing of infringing products in this State. The allegations and claims set forth in this action arise out of

Defendant's infringing activities in this State, as well as by others acting as Defendant's agents and/or representatives, such that it would be reasonable for this Court to exercise jurisdiction consistent with the principles underlying the U.S. Constitution, and would not offend traditional notions of fair play and substantial justice.

- 11. Upon further information and belief, Defendant has also established minimum contacts with this District and regularly transact and does business within this District, including advertising, promoting and selling products over the internet, through intermediaries, representatives and/or agents located within this District, that infringe Maxell's patents, which products are then sold, packaged, and shipped directly to citizens residing within this State and this District. Upon further information and belief, Defendant has purposefully directed activities at citizens of this State and located within this District.
- 12. On information and belief, Defendant has purposefully and voluntarily placed its products into the stream of commerce with the expectation that they will be purchased and used by customers located in the State of Delaware and the District of Delaware. On information and belief, Defendant's customers in the District of Delaware have purchased and used and continue to purchase and use Defendant's products.
- 13. Venue in the District of Delaware is proper pursuant to 28 U.S.C. §§ 1391 and 1400 because Defendant and/or Defendant's agent resides or may be found in this District.

COUNT 1- INFRINGEMENT OF U.S. PATENT NO. 7,995,897

14. Maxell incorporates paragraphs 1-13 above by reference.

- 15. U.S. Patent No. 7,995,897 (the "897 Patent," attached hereto as Exhibit A) duly issued on August 9, 2011, and is entitled *Video Recording and Reproducing Method, and Video Reproducing Apparatus and Method*.
- 16. Maxell is the owner by assignment of the '897 Patent and possesses all rights of recovery under the '897 Patent, including the exclusive right to recover for past and future infringement.
- 17. Defendant has directly infringed one or more claims of the '897 Patent in this judicial district and elsewhere in the United States, including at least claims 4-6 and 10-12 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Vivo XL 2.
- 18. The Vivo XL 2 is a mobile communications terminal that is capable of reproducing video by one encoding method, such as MPEG-4 and pictures by a second encoding method, such as JPEG. The Vivo XL 2 also produces thumbnails having a smaller number of pixels than the pictures as evidenced by, for example, the file size. The Vivo XL 2 has a recording medium for storing the videos, pictures, and thumbnails and a display for reproducing the same.
- 19. The foregoing features and capabilities of the Vivo XL 2, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect Defendant's direct infringement by satisfying every element of at least claims 4-6 and 10-12 of the '897 Patent, under 35 U.S.C. § 271(a).

20. On information and belief, Defendant further infringes the '897 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Vivo XL 2 (collectively, "the '897 Accused Products"). The '897 Accused Products include, by way of examples, Advance Series Phones (e.g., Advance 4.0 L3, 4.0M, 4.0 L2, 5.0, and 4.0L), Dash Series Phones (e.g., Dash L3, XL, G, L2, M2, X2, X Plus LTE, X, X Plus, and M), Energy Series Phone (X Plus 2, M, Diamond, JR, Diamond Mini, X LTE, X2, and X Plus), Grand Series Phones (e.g., Grand XL LTE, Mini, X LTE, XL, Energy, Max, X, M, and 5.5 HD), Life Series Phones (e.g., Life One X2 Mini, Max, One X2, Pure XL, Pure, Pure Mini, Mark, XL, and One X), Neo Series Phones (e.g., Neo X2, X Mini, X LTE, XL, X, X Plus, 4.5, and 3.5), Pure Series Phones (e.g., Pure XR and XL), R Series Phones (e.g., R2 LTE, R2, R1 Plus, and R1 HD), S Series Phones (e.g., S1), Studio Series Phones (e.g., Studio Pro, G Mini, J8 LTE, J8, J1, Selfie 3, J2, Mega, Selfie LTE, J5, G2 HD, Max, XL 2, G Max, G Plus HD, G2, G HD LTE, M LTE, XL LTE, G HD LTE, C 8+8, C 8+8 LTE, Touch, Selfie 2, X 5, X 6, X8 HD, 5.5 HD, G HD, One, Selfie LTE, C HD, M HD, One Plus, 7 LTE, Energy 2, G, Selfie, G Plus, 7 II, and XL), Tank Series Phones (e.g., Tank Xtreme Pro, 5.0, and 4.0), Touchbook Series (e.g., Touchbook M7 Pro and M7 MTK), Vivo Series Phones (e.g., Vivo 8, XL 2, 5 Mini, 6, 5R, 5, and XL), and Specialty Series (Diamond M). These additional products each include all necessary hardware and operating systems and work as described above with respect to the Vivo XL 2. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '897 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.

21. Defendant has indirectly infringed at least claims 4-6 and 10-12 of the '897 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '897 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '897 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Vivo XL 2 located at the following website: http://s536785483.onlinehome.us/usermanuals/index.php/vivo-xl-english-user-manual.

- Defendant is thereby liable for infringement of the '897 Patent pursuant to 35 U.S.C. § 271(b).
- 22. Defendant has indirectly infringed at least claims 4-6 and 10-12 of the '897 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '897 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '897 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 23. For example, the '897 Accused Products include components for moving and still picture encoding and reproducing functionalities. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not staple articles or commodities of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '897 Patent pursuant to 35 U.S.C. § 271(c).

- 24. Defendant has been on notice of the '897 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 4-6 and 10-12 of the '897 Patent.
- 25. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '897 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '897 Patent, and that the '897 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '897 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '897 Patent.
 - 26. Maxell has been damaged by Defendant's infringement of the '897 Patent.

COUNT 2- INFRINGEMENT OF U.S. PATENT NO. 6,917,823

- 27. Maxell incorporates paragraphs 1-26 above by reference.
- 28. U.S. Patent No. 6,917,823 (the "823 Patent," attached hereto as Exhibit B) duly issued on July 12, 2005, and is entitled *Cellular Telephone*.

- 29. Maxell is the owner by assignment of the '823 Patent and possesses all rights of recovery under the '823 Patent, including the exclusive right to recover for past and future infringement.
- 30. Defendant has directly infringed one or more claims of the '823 Patent in this judicial district and elsewhere in the United States, including at least claims 1 and 5 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Grand Energy.
- 31. The Grand Energy is a cellular telephone used in a CDMA system, such as WCDMA.
- 32. The Grand Energy has at least one antenna for receiving signals from and transmitting signals to cell-site stations, such as a base station. The Grand Energy supports and implements at least the UMTS (universal mobile telecommunications service) standards and relevant technical specifications promulgated by the 3GPP.
- 33. According to the 3GPP standards, the Grand Energy has a duplexer connected to the antenna. The Grand Energy has a receiver connected to the antenna through the duplexer in accordance with 3GPP technical specifications. The receiver is configured to receive a transmitting power controlling signal from the cell-site station. The Grand Energy has a variable amplitude amplifier which controls output power of a signal transmitted from the antenna to the cell-site station. The Grand Energy has a power amplifier for amplifying the signal output.

- 34. The Grand Energy also has a memory for storing a bias condition of the power amplifier and a controller for controlling the bias condition.
- 35. The foregoing features and capabilities of the Grand Energy, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect Defendant's direct infringement by satisfying every element of at least claims 1 and 5 of the '823 Patent, under 35 U.S.C. § 271(a).
- 36. On information and belief, Defendant further infringes the '823 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Grand Energy (collectively, "the '823 Accused Products"). The '823 Accused Products include, by way of examples, Life One X2 Mini, Life One X2, Life Pure XL, Life XL, Advance 4.0, Vivo Air, Energy M, Energy X 2, Energy Diamond Mini, Elite 3.8, Advance 4.0L, Studio 5.5S, Advance 4.0 L2, Studio G, Studio 6.0 HD D651u, Studio X, Life X8 Global, Life 8 XL, Studio 5.0 D530, Star 4.5, Studio X Plus, Life Play, Vivo 4.8 HD, Tank Xtreme 4.0, Dash XL, Touchbook M7 PRO, Touchbook M7 MTK, Grand XL, and Grand Max. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Grand Energy. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '823 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.
- 37. Defendant has indirectly infringed at least claims 1 and 5 of the '823 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the

use, offering for sale, selling, or importation of at least the '823 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '823 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Grand Energy located at the following website: http://s536785483.onlinehome.us/usermanuals/images/manuals/grand-energy/grand-energy-manual-en.pdf. Defendant is thereby liable for infringement of the '823 Patent pursuant to 35 U.S.C. § 271(b).

- 38. Defendant has indirectly infringed at least claims 1 and 5 of the '823 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '823 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '823 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 39. For example, the '823 Accused Products include a component to effectuate power control functionality. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '823 Patent pursuant to 35 U.S.C. § 271(c).

- 40. Defendant has been on notice of the '823 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1 and 5 of the '823 Patent.
- 41. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '823 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '823 Patent, and that the '823 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '823 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '823 Patent.
 - 42. Maxell has been damaged by Defendant's infringement of the '823 Patent.

COUNT 3- INFRINGEMENT OF U.S. PATENT NO. 8,130,284

- 43. Maxell incorporates paragraphs 1-42 above by reference.
- 44. U.S. Patent No. 8,130,284 (the "'284 Patent," attached hereto as Exhibit C) duly issued on March 6, 2012, and is entitled *Imaging Apparatus and Method for Controlling White Balance*.

- 45. Maxell is the owner by assignment of the '284 Patent and possesses all rights of recovery under the '284 Patent, including the exclusive right to recover for past and future infringement.
- 46. Defendant has directly infringed one or more claims of the '284 Patent in this judicial district and elsewhere in the United States, including at least claims 1, 3, 5, and 7 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Pure XR.
- 47. The Pure XR is an image processing apparatus with a display that displays images that are picked up by an image pick up device and processed by the image processor. The Pure XR has a white balance circuit that ensures that white objects in images picked up by the image sensor appear white. The Pure XR also includes a circuit and/or processor for detecting object distance, detecting a zoom value, and detecting object brightness. For example, the Pure XR has autofocus functions, brightness measurement functions, zooming functions, and white balance functionalities. The Pure XR controls white balance in an image based on these distance, zoom, and brightness values. The Pure XR also has a circuit for setting a threshold on the basis of object brightness, zoom, and distance.
- 48. The foregoing features and capabilities of the Pure XR, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect Defendant's direct infringement by satisfying every element of at least claims 1, 3, 5, and 7 of the '284 Patent, under 35 U.S.C. § 271(a).

- 49. On information and belief, Defendant further infringes the '284 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Pure XR (collectively, "the '284 Accused Products"). The '284 Accused Products include, by way of examples, Life One X2, Life Pure XL, R2 LTE, R1 Plus, Life One X2 Mini, Vivo XL2, Vivo 6, Vivo 5R, Vivo 5, Life Pure, Studio One, Studio One Plus, Life Mark, Life XL, Life One X, and Vivo XL. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Pure XR. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '284 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.
- 50. Defendant has indirectly infringed at least claims 1, 3, 5, and 7 of the '284 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '284 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '284 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Pure XR located at the following website: http://s536785483.onlinehome.us/usermanuals/index.php/pure-xr-english-user-manual.
- 51. Defendant has indirectly infringed at least claims 1, 3, 5, and 7 of the '284 Patent, by, among other things, contributing to the direct infringement of others, including customers of

Defendant is thereby liable for infringement of the '284 Patent pursuant to 35 U.S.C. § 271(b).

the '284 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '284 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

- 52. For example, the '284 Accused Products include a white balance control component. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '284 Patent pursuant to 35 U.S.C. § 271(c).
- 53. Defendant has been on notice of the '284 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1, 3, 5, and 7 of the '284 Patent.
- 54. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '284 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '284 Patent, and that the '284 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '284 Patent, nor could it reasonably, subjectively believe that

the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '284 Patent.

55. Maxell has been damaged by Defendant's infringement of the '284 Patent.

COUNT 4- INFRINGEMENT OF U.S. PATENT NO. 6,347,068

- 56. Maxell incorporates paragraphs 1-55 above by reference.
- 57. U.S. Patent No. 6,347,068 (the "'068 Patent," attached hereto as Exhibit D) duly issued on February 12, 2002, and is entitled *Information Recording Medium, Enclosing Casing of Information Recording Medium, and Information Recording Apparatus Using the Same*.
- 58. Maxell is the owner by assignment of the '068 Patent and possesses all rights of recovery under the '068 Patent, including the exclusive right to recover for past and future infringement.
- 59. Defendant has directly infringed one or more claims of the '068 Patent in this judicial district and elsewhere in the United States, including at least claim 2 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Vivo XL 2.
- 60. The Vivo XL 2 is an information recording apparatus with a recording medium for storing data such as pictures and videos. The Vivo XL 2 has electrical components for controlling and interfacing with the recording medium. The Vivo XL 2 also has a processor for processing data stored on the recording medium. The Vivo XL 2 has a battery for supplying

electric power to the information recording apparatus. The Vivo XL 2 has a battery indicator to show the amount of remaining battery power as the battery power decreases over time. The recording medium in Vivo XL 2 records pictures and videos and records information with the pictures and videos such as time, data, format, size etc. in order to manage the stored data.

- 61. The foregoing features and capabilities of the Vivo XL 2, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect Defendant's direct infringement by satisfying every element of at least claim 2 of the '068 Patent, under 35 U.S.C. § 271(a).
- 62. On information and belief, Defendant further infringes the '068 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Vivo XL 2 (collectively, "the '068 Accused Products"). The '068 Accused Products include, by way of examples, Advance Series Phones (e.g., Advance 4.0 L3, 4.0M, 4.0 L2, 5.0, and 4.0L), Dash Series Phones (e.g., Dash L3, XL, G, L2, M2, X2, X Plus LTE, X, X Plus, and M), Energy Series Phones (X Plus 2, M, Diamond, JR, Mini, X LTE, X2, and X Plus), Grand Series Phones (e.g., Grand XL LTE, Mini, X LTE, XL, Energy, Max, X, M, and 5.5 HD), Life Series Phones (e.g., Life One X2 Mini, Max, One X2, Pure XL, Pure, Pure Mini, Mark, XL, and One X), Neo Series Phones (e.g., Neo X2, X Mini, X LTE, XL, X, X Plus, 4.5, and 3.5), Pure Series Phones (e.g., Pure XR and XL), R Series Phones (e.g., R2 LTE, R2, R1 Plus, and R1 HD), S Series Phones (e.g., S1), Studio Series Phones (e.g., Studio Pro, G Mini, J8 LTE, J8, J1, Selfie 3, J2, Mega, Selfie LTE, J5, G2 HD, Max, XL 2, G Max, G Plus HD, G2, G HD LTE, M LTE, XL LTe, G HD LTE, C 8+8, C 8+8 LTE, Touch, Selfie 2, X 5, X 6, X8 HD, 5.5 HD, G HD, One, Selfie LTE, C HD, M HD, One Plus, 7 LTE, Energy 2, G, Selfie, G Plus, 7 II, and XL), Tank Series Phones (e.g., Tank Xtreme Pro, 5.0, and 4.0), Touchbook Series (e.g.,

Touchbook M7 Pro and M7 MTK), Vivo Series Phones (e.g., Vivo 8, XL 2, 5 Mini, 6, 5R, 5, and XL), and Specialty Series (Diamond M). These additional products each include all necessary hardware and operating systems and work as described above with respect to the Vivo XL 2. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '068 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.

- 63. Defendant has indirectly infringed at least claim 2 of the '068 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '068 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '068 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Vivo XL 2 located at the following website: http://s536785483.onlinehome.us/usermanuals/index.php/vivo-xl-english-user-manual.
- Defendant is thereby liable for infringement of the '068 Patent pursuant to 35 U.S.C. § 271(b).
- 64. Defendant has indirectly infringed at least claim 2 of the '068 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '068 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to

be especially made or especially adapted for use in infringement of the '068 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

- 65. For example, the '068 Accused Products include an information recording component. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '068 Patent pursuant to 35 U.S.C. § 271(c).
- 66. Defendant has been on notice of the '068 Patent since, at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claim 2 of the '068 Patent.
- 67. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '068 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '068 Patent, and that the '068 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '068 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '068 Patent.

68. Maxell has been damaged by Defendant's infringement of the '068 Patent.

COUNT 5- INFRINGEMENT OF U.S. PATENT NO. 8,059,177

- 69. Maxell incorporates paragraphs 1-68 above by reference.
- 70. U.S. Patent No. 8,059,177 (the "177 Patent," attached hereto as Exhibit E) duly issued on November 15, 2011, and is entitled *Electric Camera*.
- 71. Maxell is the owner by assignment of the '177 Patent and possesses all rights of recovery under the '177 Patent, including the exclusive right to recover for past and future infringement.
- 72. Defendant has directly infringed one or more claims of the '177 Patent in this judicial district and elsewhere in the United States, including at least claim 1 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Vivo XL 2.
- 73. The Vivo XL 2 includes an electric camera. The Vivo XL 2 includes an image sensing device with an array of pixels arranged vertically and horizontally in a grid pattern. The Vivo XL 2 includes a 13MP camera with auto focus as well as an 8MP front camera. On information and belief, image sensors such as the 13 megapixel auto-focus camera have a light receiving surface having N vertically arranged pixels and an arbitrary number of pixels arranged horizontally, N being equal to or more than three times the number of effective scanning lines M of a television system, at least in order to display the image in horizontal and vertical planes on the Vivo XL 2.

- 74. On information and belief, the Vivo XL 2 includes a driver including a first driver mode to drive the image sensing device to vertically mix or cull signal charges accumulated in individual pixels of every K pixels to produce a number of lines of output signals which corresponds to the number of effective scanning lines M, K being at least one of integers equal to or less than an integral part of a quotient of N divided by M. On information and belief, the Vivo XL 2 includes a second driver mode to drive the image sensing device to vertically mix or cull signal charges accumulated in individual pixels of every K pixels to produce, during a vertical effective scanning period of the television system, a number of lines of output signals which corresponds to 1/K the number of vertically arranged pixels N of the image sensing device, K being an integer equal to or less than an integral part of a quotient of N divided by M.
- 75. The Vivo XL 2 includes a processor programmed to perform various signal processing function including video recording, digital zoom, and face detection. In addition, the Vivo XL 2 includes a processor programmed to perform signal processing to generate video in various formats by using the pixel data received from the image sensing device.
- 76. On information and belief, the driving by the first driver mode and the driving by the second driver mode of the Vivo XL 2 are selectively switched according to input information from a switch provided inside or outside the electric camera. The Vivo XL 2 includes a processor programmed to provide a graphical user interface (GUI) to allow a user to control the operation of the functionalities provided in the Vivo XL 2 including for controlling camera operation. The GUI also provides a zoom switching functionality.
- 77. The foregoing features and capabilities of the Vivo XL 2, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect

Defendant's direct infringement by satisfying every element of at least claim 1 of the '177 Patent, under 35 U.S.C. § 271(a).

- 78. On information and belief, Defendant further infringes the '177 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Vivo XL 2 (collectively, "the '177 Accused Products"). The '177 Accused Products include, by way of examples, Life One X2, Life Pure XL, R2 LTE, R1 Plus, Life One X2 Mini, Vivo XL2, Vivo 6, Vivo 5R, Vivo 5, Life Pure, Studio One, Studio One Plus, Life Mark, Life XL, Life One X, and Vivo XL. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Vivo XL 2. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '177 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.
- 79. Defendant has indirectly infringed at least claim 1 of the '177 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '177 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '177 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Vivo XL 2 located at the following website: http://s536785483.onlinehome.us/usermanuals/index.php/vivo-xl-english-user-manual.

Defendant is thereby liable for infringement of the '177 Patent pursuant to 35 U.S.C. § 271(b).

- 80. Defendant has indirectly infringed at least claim 1 of the '177 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '177 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '177 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 81. For example, the '177 Accused Products include components for processing image signals and displaying images. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '177 Patent pursuant to 35 U.S.C. § 271(c).
- 82. Defendant has been on notice of the '177 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claim 1 of the '177 Patent.
- 83. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '177 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '177 Patent, and that the '177 Patent is valid. On

information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '177 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '177 Patent.

84. Maxell has been damaged by Defendant's infringement of the '177 Patent.

COUNT 6- INFRINGEMENT OF U.S. PATENT NO. 9,100,604

- 85. Maxell incorporates paragraphs 1-84 above by reference.
- 86. U.S. Patent No. 9,100,604 (the "'604 Patent," attached hereto as Exhibit F) duly issued on August 4, 2015, and is entitled *Electric Camera*.
- 87. Maxell is the owner by assignment of the '604 Patent and possesses all rights of recovery under the '604 Patent, including the exclusive right to recover for past and future infringement.
- 88. Defendant has directly infringed one or more claims of the '604 Patent in this judicial district and elsewhere in the United States, including at least claim 4 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Vivo XL 2.
- 89. The Vivo XL 2 includes an electric camera. The Vivo XL 2 includes an image sensing device with an array of pixels arranged vertically and horizontally in a grid pattern. The Vivo XL 2 includes a 13MP camera with auto focus as well as an 8MP front camera. On

information and belief, image sensors such as the 13 megapixel auto-focus camera have a light receiving surface having N vertically arranged pixels and an arbitrary number of pixels arranged horizontally, N being equal to or more than three times the number of effective scanning lines M of a television system, at least in order to display the image in horizontal and vertical planes on the Vivo XL 2.

- 90. The Vivo XL 2 includes a processor programmed to perform various signal processing functions including video recording, digital zoom, and face detection. In addition, the Vivo XL 2 includes a processor programmed to perform signal processing to generate video in various formats by using the pixel data received from the image sensing device.
- 91. The Vivo XL 2 has a zoom switch configured to enable a user to input zooming operation information. The Vivo XL 2 includes a processor programmed to provide a graphical user interface (GUI) to allow a user to control the operation of the functionalities provided in the Vivo XL 2 including for controlling camera operation. The GUI also provides a zoom switching functionality.
- 92. On information and belief, the Vivo XL 2 has a signal processing unit that generates the image signals, read out with mixing or culling vertical pixel lines of signals, at pixel intervals of a quantity K of lines, from different areas of the imaging device, the areas being continuously changed, and the quantity K being discontinuously changed according to magnification factors.
- 93. The foregoing features and capabilities of the Vivo XL 2, and Defendant's description and/or demonstration thereof, including in user manuals and advertising, reflect

Defendant's direct infringement by satisfying every element of at least claim 4 of the '604 Patent, under 35 U.S.C. § 271(a).

- 94. On information and belief, Defendant further infringes the '604 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Vivo XL 2 (collectively, "the '604 Accused Products"). The '604 Accused Products include, by way of examples, Life One X2, Life Pure XL, R2 LTE, R1 Plus, Life One X2 Mini, Vivo XL2, Vivo 6, Vivo 5R, Vivo 5, Life Pure, Studio One, Studio One Plus, Life Mark, Life XL, Life One X, and Vivo XL. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Vivo XL 2. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '604 Accused Products are identified to describe the Defendant's infringement and in no way limit the discovery and infringement allegations against Defendant concerning other devices that incorporate the same or reasonably similar functionalities.
- 95. Defendant has indirectly infringed at least claim 4 of the '604 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '604 Accused Products. Defendant's customers who purchase devices and components thereof and operate such devices and components in accordance with Defendant's instructions directly infringe one or more claims of the '604 Patent in violation of 35 U.S.C. § 271. Defendant instructs its customers through at least user guides, such as those for the Vivo XL 2 located at the following website: http://s536785483.onlinehome.us/usermanuals/index.php/vivo-xl-english-user-manual.

Defendant is thereby liable for infringement of the '604 Patent pursuant to 35 U.S.C. § 271(b).

- 96. Defendant has indirectly infringed at least claim 4 of the '604 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '604 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '604 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 97. For example, the '604 Accused Products include components for processing image signals and displaying images. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for infringement of the '604 Patent pursuant to 35 U.S.C. § 271(c).
- 98. Defendant has been on notice of the '604 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claim 4 of the '604 Patent.
- 99. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '604 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '604 Patent, and that the '604 Patent is valid. On

information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '604 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '604 Patent.

100. Maxell has been damaged by Defendant's infringement of the '604 Patent.

PRAYER FOR RELIEF

WHEREFORE, Maxell prays for relief as follows:

- 101. A judgment declaring that Defendant has infringed and is infringing one or more claims of the '897, '823, '284, '068, '177, and '604 Patents;
- 102. A judgment awarding Maxell compensatory damages as a result of Defendant's infringement of one or more claims of the '897, '823, '284, '068, '177, and '604 Patents, together with interest and costs, consistent with lost profits and in no event less than a reasonable royalty;
- 103. A judgment awarding Maxell treble damages and pre-judgment interest under 35 U.S.C. § 284 as a result of Defendant's willful and deliberate infringement of one or more claims of the '897, '823, '284, '068, '177, and '604 Patents;
- 104. A judgment declaring that this case is exceptional and awarding Maxell its expenses, costs, and attorneys' fees in accordance with 35 U.S.C. §§ 284 and 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

105. A grant of preliminary and permanent injunctions enjoining Defendant from further acts of infringement of one or more claims of the '897, '823, '284, '068, '177, and '604 Patents; and

106. Such other and further relief as the Court deems just and proper.

JURY TRIAL DEMANDED

Maxell hereby demands trial by jury.

Respectfully submitted,

ROSS ARONSTAM & MORITZ LLP

Of Counsel:

Jamie B. Beaber* Kfir Levy* James A. Fussell, III* Baldine Paul* Tiffany A. Miller* Saqib Siddiqui* MAYER BROWN LLP 1999 K Street, N.W. Washington, D.C. 20006 (202) 263-3000 jbeaber@mayerbrown.com klevy@mayerbrown.com ifussell@mayerbrown.com bpaul@mayerbrown.com tmiller@mayerbrown.com ssiddiqui@mayerbrown.com

Amanda K. Streff*
MAYER BROWN LLP
71 S. Wacker Drive
Chicago, IL 60606
(312) 782-0600
astreff@mayerbrown.com

(* pro hac vice application to be filed)

Dated: October 13, 2017

/s/ Benjamin J. Schladweiler

Benjamin J. Schladweiler (#4601) 100 S. West Street, Suite 400 Wilmington, DE 19801 (302) 576-1600 bschladweiler@ramllp.com

Counsel for Plaintiff Maxell, Ltd.